



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,314	04/18/2006	Erwin Rinaldo Meinders	FR 030126	4451
24737 7590 05/22/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
FANG, PAKEE				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
05/22/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,314

Applicant(s)

MEINDERS ET AL.

Examiner

PAKEE FANG

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on January 27, 2009 has been entered and considered by examiner. Claims 1 - 12 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the application filed on 04/18/2006.

Claim Objections

3. The claims 1, 3-8, 11-12 are objected to because the use of parentheses such as (V1) in claims 1, 11-12 are improper since parentheses are used only for the references characters See MPEP § 608.01(m).

Claims 3-8 are also objected due to being dependent of the objected base claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (U.S. Patent. 7,116,309) in view of Tukude (U.S. Patent. 4,702,566), and further in view of Chapman (U.S. Patent. 4,008,950).

In regard to claim 9, Kimura discloses (Figs. 5 - 8) a method for recording an image in a display (Col. 2 lines 25 – 35) said method comprising a step of locally altering said at least one image sub-stack in order to record an image (Figs. 5 & 6 shows sub-stack can be alter to record image) (Col. 6 lines 38-56), wherein said locally altering comprises patterning a material within said sub- stack (Figs. 5 & 6 shows sub-stack can be alter to record image by patterning the layers or material) (Col. 6 lines 38-56), but Kimura does not explicitly teach holes corresponds to depth within the material or the relation of the hole and the color. However, Tukude discloses (Fig. 5)n holes correspond to the thickness or depth of the electrode material (Col. 3 lines 49-58). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention was made to combine the material in the electrochromic display of Kimura with the holes correspond to the depth in the material of Tukude to improve effective display area and the responds speed of the display (Tukude, Col. 2 lines 1-5), But Kimura and Tukude do not explicitly teach the relationship between the hole and the intensity of light/color. However, Chapman discloses cavity/hole depth in the material of certain thickness can affect the color of the region and in order to make color even in the area of the cavity region, the cavity has to be in a certain depth. (Col. 2 lines 23 – 27) Thus, if the depth of the cavity is less than the require depth the color of the region will not be even or reduce. It is clear that the known depth of the holes (i.e. cavity) in

Chapman determining a reduction of an intensity of light (i.e. color generated from the light) compared to the intensity of light of the material surrounding a corresponding hole holes (i.e. the depth of the color depends on the depths of the cavity). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention was made to combine the material in the electrochromic display of Kimura with the holes correspond to the depth in the material of Tukude with the relation of color evenness to the depth of a cavity in the material of Chapman so as to make the display material thinner and enhance the appearance of the display (Chapman, Col. 2 lines 35-38).

In regard to claim 1, this claim differs from claim 9 in that the limitation "a potential difference (v_1)" and "sub-stack comprising a material having optical properties" are additionally recited. Kimura discloses (Figs. 1, 6, 8, 21) a display (77) for displaying pre-recorded images (Col. 2 lines 25-35), said display comprising at least one image stack (Fig. 6 or 3) comprising at least one image sub-stack (13, 15, 17, or 19) (Col. 6 lines 8-35), said image sub-stack comprising a material having optical properties (reflecting & transparent) (Col. 5 line 61 – Col. 6 line 15) depend on a potential difference (V or V_1 or V_2 or V_3) applied between two electrodes (13, or 15) (Col. 2 lines 25-35), wherein said image sub-stack can be locally altered in order to record an image by patterning said material, (Figs. 5 & 6 shows sub-stack can be altered to record image by patterning the layers or material) (Col. 6 lines 38-56); All the identical limitations are rejected based on the same rationale as claim 9.

In regard to claim 2, this claim substantially recite the same limitation as claim 1. Thus, all the identical limitations are rejected base on the same rationale as claim 1.

In regard to claim 11, this claim differs from claim 2 in that the limitation "a cartridge", "means for receiving said display", "means for receiving a signal", and "means for applying" are additionally recited.

Kimura discloses (Figs. 1, 3, 6, 8, and 21) a cartridge (81) for recording an image in a display (77) said cartridge comprising:

means for receiving said display (image stack means for receiving said display), said display comprising at least one image stack comprising at least one image sub-stack (13, 15, 17, or 19) (Col. 6 lines 8-35),

means for receiving a signal comprising information about a selected image sub-stack Col. 6 line 16- 20 or Col. 14 Line 21 - 48);
and

means for applying a potential difference between the two electrodes of said selected image sub-stack (Col. 2 line 6 – 36 or Col. 6 line 8 - 35).

All the identical limitations are rejected base on the same rationale as claim 2.

In regard to claim 12, this claim differs from claim 11 only by the limitation "means for selecting an image sub-stack" is additionally recited.

Kimura discloses (Figs. 1, 3, 6, 8, and 21) means for selecting an image sub-stack (Col. 6 line 16- 20 or Col. 14 Line 21 - 48); All other identical limitation is rejected base on the same rationale as claim 11.

In regard to claim 3, Kimura discloses (Figs. 3-6) wherein said material is an electrochromic material "...electrochromic layers are laminated or an electrochromic material..." (Col. 2 line 5 – 25).

In regard to claim 4, Kimura discloses (Figs. 3-6 & 10-13) wherein said electrochromic material has an ability to take up or release electrons, which can be locally reduced by means of an optical beam (Col. 6 lines 5 - 35) ("supply or receipt of electrons is performed in only the region of the EC layer 17 corresponding to the foregoing region of the photoconductor layer 15" which is proportionally affected by writing light)

In regard to claim 5, Kimura discloses (Fig. 17) display further comprising a color filter. (Col. 17 line 5 – 25) ("structure incorporating color filters.")

In regard to claim 7, Kimura discloses (Fig. 3-6) wherein said at least one image stack comprises at least two image sub-stacks (photoconductor layer 15, and EC layer 17) comprising materials having different optical properties (Col. 6 lines 25-35 and lines 46-56), Furthermore, Kimura discloses (reflective optical properties for reflecting film 9

and transparent optical properties for layer 13).

In regard to claim 8, Kimura discloses (Figs. 3-6) said display comprising at least two image stacks (15, 17, 13, and 19) (Col. 6 lines 36-56).

In regard to claim 10, Kimura discloses (Figs. 5 - 8) wherein said altering step (Figs. 5 and 6 shows altering steps for the material) (Col. 6 lines 38-56) comprises a sub-step of focusing an optical beam on the at least one image sub-stack (Figs. 8-13 Shows a sub-step where writing light is focused on one of the image sub-stack) (Col. 6 line 5 -15 and Col. 9 lines 46-67).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (7116309), and Tukude (4702566) in view of Chapman (4008950) and Yamazaki (20010040655).

In regard to claim 6, Kimura, Tukude, and Chapman disclose every limitation from claim 1 which claim 6 is depended on. Kimura discloses color filters, but Kimura Tukude, and Chapman do not explicitly teach color filter comprising pixels having different colors. However, Yamazaki discloses color filter comprising different color pixels. [0150] (See motivation to combine Kimura, Tukude, and Chapman from the independent claim), it would have been obvious for one of ordinary skill in the art at the time of invention was made to combine the material in the electrochromic display of

Kimura with the holes correspond to the depth in the material of Tukude with the relation of color evenness to the depth of a cavity in the material of Chapman with the multi-color pixels for the multi-color filters of Yamazaki to improve effective display area and the responds speed of the display (Tukude, Col. 2 lines 1-5) and to make the display material thinner and enhance the appearance of the display (Chapman, Col. 2 lines 35-38) and to improve the color quality of the display.

Response to Arguments

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the references of Tukude, Chapman, and Yamazaki have been used for new ground of rejections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **PAKEE FANG** whose telephone number is (571)270-7219. The examiner can normally be reached on **Mon-Friday 9 AM - 5 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAKEE FANG/
Examiner, Art Unit 2629

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629

